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GRAIN QUALITY MONITOR

ABSTRACT OF THE DISCLOSURE

Percentage concentrations of constituents of a sample of cereal grain or other agricultural product in a flowing stream are determined while harvesting or processing using a short wave near infrared analyzer. The analyzer irradiates the sample, picks up diffuse reflectance of individual wavelengths from the sample and spatially separates the diffuse reflectance into a response at individual wavelengths. The result is to simultaneously detect the intensities of the individual wavelengths in parallel from the same portion of the product being analyzed. Percentage constituents of the composite substance may then be compared with known percentage constituents to determine the constituents. The analyzer is optically stabilized and is therefore suitable for attaching to the agricultural combine to perform real time measurements in the field.